

Notice of Allowability

Application No.

09/895,933

Examiner

James R Scott

Applicant(s)

NELSON ET AL.

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to PAPERS FILED 12/24/2003 AND 1/12/2004.
2. ☒ The allowed claim(s) is/are 1-5, 7-9, 11, 12, 14 and 27-41.
3. ☒ The drawings filed on 24 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 01122004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT/COMMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

The Examiner has made no amendments to the application.

Cited References

Menze, Fagan, Hertz et al, Baccini, Burk, Zachman et al, Klein, Maser, Brown, O'Rourke, Plichta et al, and Lemoine et al constitute prior art cited by the applicants pertaining to membrane switches and the manufacture thereof, including the formation of circuits associated with through holes in printed circuits boards or a portion thereof.

Maser, Riniker, O'Rourke, Nellis et al, Seeger, Seeger Jr., Hendricks, White et al and the two PCT documents constitute prior art considered by the Examiner in prior examinations of this application for the reasons initially stated in the non-final Office Action dated 4/9/2003.

Maser and O'Rourke constitute common references cited separately by the applicant and the Examiner in their separate prior art citations.

Since copies of the references considered by the Examiner were provided to applicant prior to this examination, no copies of these references are provided to applicants with this Office Action.

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Drawings

The drawings submitted on 12/24/2003 are acceptable.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance. The prior art cited by the applicants nor the prior art cited by the Examiner do not disclose the use of pads printed on the first membrane layer corresponding to thru-holes locations in the second membrane layer for receiving conductive ink as an interconnect between the membrane circuit lines. It is noted that the International Publication WO 03/002346 A2 and its published search report WO 03/002346 A3 rely upon this application for priority purposes. The cited Menze, Klein, Fagan and Burk set forth in applicants Information Disclosure Statement filed 1/12/2004 are cited as references in the International Search Report teach the use of membrane switches while Fagan and Burk additionally teach the use of conductive ink. Fagan and Burk fall far short in anticipating or rendering obvious the claimed subject matter of the allowed claims of this application because the conductive ink is used solely as a contact layer in the cited patents and and the conductive ink does not function as an interconnect medium located between two membranes in a through hole.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Summary

Claims 1-5,7-9,11,12,14 and 27-41 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R Scott who can be reached at **(571) 272-1999** after 2/03/2004.


The examiner can normally be reached on weekdays from 1 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached at **(571) 272-1990** after 2/03/2004.

Effective immediately, all patent application related correspondence transmitted by FAX to the USPTO must be directed to the central FAX number (703-872-9306).

JRScott: jrs

3/2/2004


J. R. Scott
Primary Examiner
GAU 2832